UNITED STATES PATENT AND TRADEMARK OFFICE

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/767,476	01/22/2001	Thomas Glenn Hall JR.	RIC00020	3255

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EXAMINER
AGDEPPA, HECTOR A

ART UNIT	PAPER NUMBER
2642	

DATE MAILED: 02/13/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

PTO-90C (Rev. 10/03)

	Application No.	Applicant(s)
Office Action Summary	09/767,476	HALL ET AL.
	Examiner	**Art Unit**
	Hector A. Agdeppa	2642

-- *The MAILING DATE of this communication appears on the cover sheet with the correspondence address* --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE <u>3</u> MONTH(S) FROM
THE MAILING DATE OF THIS COMMUNICATION.
- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed
  after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
  Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any
  earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on <u>22 January 2001 and 07 September 2001</u>.
2a)☐ This action is **FINAL**.   2b)☒ This action is non-final.
3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is
   closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) <u>1-25</u> is/are pending in the application.
   4a) Of the above claim(s) _____ is/are withdrawn from consideration.
5)☐ Claim(s) _____ is/are allowed.
6)☒ Claim(s) <u>1-25</u> is/are rejected.
7)☐ Claim(s) _____ is/are objected to.
8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☒ The specification is objected to by the Examiner.
10)☒ The drawing(s) filed on <u>22 January 2001</u> is/are: a)☒ accepted or b)☐ objected to by the Examiner.
   Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
   Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
   a)☐ All   b)☐ Some * c)☐ None of:
   1.☐ Certified copies of the priority documents have been received.
   2.☐ Certified copies of the priority documents have been received in Application No. _____.
   3.☐ Copies of the certified copies of the priority documents have been received in this National Stage
      application from the International Bureau (PCT Rule 17.2(a)).
   * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)
1) ☒ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☒ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
   Paper No(s)/Mail Date <u>4</u>.
4) ☐ Interview Summary (PTO-413)
   Paper No(s)/Mail Date. _____ .
5) ☐ Notice of Informal Patent Application (PTO-152)
6) ☐ Other: _____.

DETAILED ACTION

Specification

1.   The disclosure is objected to because of the following informalities:

Applicant has failed to include US Patent Application Serial Numbers for those

applications cited in the "Cross-Reference to Related Applications" section of the

specification.

Appropriate correction is required.

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all

obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

This application currently names joint inventors. In considering patentability of

the claims under 35 U.S.C. 103(a), the examiner presumes that the subject matter of

the various claims was commonly owned at the time any inventions covered therein

were made absent any evidence to the contrary. Applicant is advised of the obligation

under 37 CFR 1.56 to point out the inventor and invention dates of each claim that was

not commonly owned at the time a later invention was made in order for the examiner to

consider the applicability of 35 U.S.C. 103(c) and potential 35 U.S.C. 102(e), (f) or (g)

prior art under 35 U.S.C. 103(a).

2.   Claims 1- 25 are rejected under 35 U.S.C. 103(a) as being unpatentable over US

5,539,884 (Robrock, II) in view of US 6,252,952 (Kung et al.)

As to claims 1, 4, 8, and 9, Robrock teaches an intelligent broadband system

using an ATM network, capable of processing data, video, and voice, read as the

claimed VToA services, as well as closed user group services. The system of Robrock

employs a broadband intelligent network (BIN) SCP read as the claimed multi-service

SCP, which is used to support and control the execution of a closed user group service.

Because Robrock teaches an intelligent network, it is inherent that there would

be an incoming call alert/message, which is likened to the claimed ATM setup message.

Robrock further teaches cell addressing with regards to ATM call routing, wherein the

ATM packet includes a virtual path indicator and virtual channel indicator which is used

to route a call between a calling and called port which is likened to a calling and called

party phone number value, and an ATM cell header, which would read on the claimed

VToA designator. (Figs. 4A – 4C, Col. 7, line 8 – Col. 9, line 30 of Robrock). Moreover,

because BIN SCP 61 handles multiple services such as voice, data, and video

payloads, it is inherent that some designator is used to distinguish between the different

types of communications, i.e., a VToA designator. (Col. 9, lines 31 – 43 of Robrock)

Moreover, it is inherent in any data packet or setup message, that information must be

extracted. Such is the only way for the BIN SCP 61 to get the required information from

a message.

Also, any intelligent network, such as the one taught by Robrock, operates by receiving a call request/incoming call alert/message from a service switching point/switch read as the claimed ingress ATM edge switch, which includes therein a trigger which triggers the BIN SCP 61 to access its databases to retrieve instructions on how to route a call. Once this call routing is determined, the BIN SCP 61 will generate a response, read as the claimed output, that is sent to the switch and instructs the switch on how to route the call. Moreover, Robrock teaches a connection management processor 64 which would read on the claimed ATM signaling intercept processor. (Figs. 2A and 2B, Col. 7, lines 60 – 67, and Col. 10, line 1 – Col. 11, line 20 of Robrock)

It is also inherent that a service administration would have to be provided to provision the BIN SCP 61 inasmuch as the databases and instructions must somehow be given to the SCP. The same would of course be true for the intercept processor.

While Robrock generally teaches that the system can accommodate CUGs, Robrock does not teach specifically determining whether to authorize a VToA call between a calling and called party.

However, Kung et al. teaches a broadband network/system that has interconnected to it, both intelligent networks (SS7 networks) and ATM networks. (Col. 5, lines 3 – 28 of Kung et al.) Furthermore, Kung et al. teaches determining whether a CUG call can be made between a calling and called party. (Col. 31, line 10 – Col. 32, line 51 of Kung et al.)

It would have been obvious for one of ordinary skill in the art to have combined the teachings of Robrock and Kung et al., inasmuch as King et al. merely describes in

detail the CUG aspect which Robrock already contemplates. Also, Robrock and Kung et al. both teach broadband networks based on intelligent and ATM networks.

As to claims 2, 3, 10 – 15, Kung et al. teaches determining the identity of both the calling and called parties to see if they belong to a CUG, read as the claimed SUG identifiers. A common CUG identifier is also located because the system needs to associate the calling and called party with the same CUG to make a CUG call. (Col. 31, line 53 – Col. 33, line 15 of Kung et al.) Robrock, also, in relation to all calls, not necessarily only CUG calls, teaches determining checking whether or not a calling party is authorized to make a call to the called party and whether or not the called party can receive a call from the calling party. (Col. 12, lines 28 – 45 of Robrock)

Kung et al. also teaches an intercom CUG service wherein one member may contact one or more CUG members and notifies the calling party when the called party is not part of the same CUG as a result of, for example, the calling party making an error in dialing. While the privileges of other CUGs are not examined, such would merely be an obvious extension of Robrock and Kung et al. to one of ordinary skill in the art at the time the invention was made. This is because such a feature merely provides a calling party with the notification/option to realize their mistake, or if the called party truly is not in the same CUG, notifies a caller of their other possible calling options such as making/receiving call to/from those outside the CUG or from those in another CUG that the calling/called party may be associated with. Similar features/notifications are old and well known in the telephony and computer arts instead of merely failing the call and leaving a caller/called party with no recourse.

Of course, the same reasoning would be applied to receiving a call as well as making an outgoing call.

As to claim 5, Robrock has been discussed above as teaching the use of ATM data packets having VPI, VCI, cell header information, etc. It is old and well known in the data and telephony communication arts to be able to configure or append or put in, certain bit groups, necessary data so long as the protocol requirements are met. Moreover, called party and calling party number values have been discussed above and because such values are necessary to route and connect a calling party to a called party, it is inherent that they are located somewhere in the call setup message.

As to claim 6, because Robrock teaches providing both permanent virtual channel (PVC) and switched virtual channel (SVC) support, it would be inherent or at the very least obvious that the BIN SCP 61 would have to be notified of which type of channel is to be used when setting up a call. Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to have allowed for this notification to be given within the call setup message, inasmuch as this would be the opportune if not only time appropriate to make the decision between using either a PVC or an SVC. (Col. 7, lines 25 – 47, Col. 12, lines 15 - 26 of Robrock)

As to claim 7, Robrock teaches lookup tables which the ATM switch would use to translate incoming cells to the proper outgoing cells. Also, Robrock teaches that the BIN SCP 61 also performs translations to determine where to route a call, including address translation. (Col. 9, line 4 – Col. 10, line 59, Col. 12, lines 1 – 64 of Robrock)

As to claims 15 and 16, Kung et al. has already been discussed above (see rejection of claim 2) as providing an error when a call cannot be completed. This effectively is a failure and the call will not be completed.

As to claim 18, see the rejection of claim 1.

As to claim 19, it is inherent or at the least obvious that no interlocking code is needed because, as described in the specification for the present invention, none is needed in an SCP capable of providing CUG service in addition to the other features normally available in an intelligent network. Such, as discussed above, is taught by both Robrock and Kung et al.

As to claim 20, see the above rejection of claims 1 and 2. Also, Kung et al. teaches multiple users, user groups, CUGs, and inherently privilege sets which are needed for the plurality of CUGs. (Col. 30, line 49 – Col. 31, line 10 of Kung et al.)

As to claims 21 – 24, such are merely configuration options for defining user groups and CUGs, any of which would be obvious to one of ordinary skill in the art at the time the invention was made. One user could be associated with more than one group, but does not have to be. Also, a group of users could be associated with one or more closed user groups. All such options merely depend on how users and groups are broken up within organization or even between organizations. Kung et al. teaches a CUG example of IEEE engineers. One group could be all the IEEE members in one location, yet all IEEE members, nationwide, for example, could also belong to a general IEEE CUG.

As to claim 25, see the rejection of claims 2 and 24. Such limitations are again, merely various options that would be provided to users of a CUG.

Conclusion

3.   The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. US 6,169,735 (Allen, Jr. et al.) teaches an ATM-based distributed virtual tandem switching system that operates to overcome the limitation of not being able to support out-of-band signaling such as in SS7/intelligent networks. US 6,081,524 (Chase et al.) teaches supporting closed user group services in an ATM network (VToA). US 5,987,520 (Libby et al.) also teaches supporting closed user group services in an ATM network (VToA).

4.   Any inquiry concerning this communication or earlier communications from the examiner should be directed to Hector A. Agdeppa whose telephone number is 703-305-1844. The examiner can normally be reached on Mon thru Fri 9:30am - 6:00pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Ahmad F. Matar can be reached on 703-305-4731. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the

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For more information about the PAIR system, see http://pair-direct.uspto.gov. Should

you have questions on access to the Private PAIR system, contact the Electronic

Business Center (EBC) at 866-217-9197 (toll-free).

H.A.A.
February 5, 2004

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